

## **WHAT IS CLAIMED IS:**

1. A monitoring system comprising video means sited to view an area of interest characterized by its proximity to, and/or location with respect to, at least one visual stimulus, means for generating electrical signals representing video images of said area at different times, processing means for processing said signals to determine a behavior pattern of people traversing said area and means utilizing said behavior pattern to provide an indication of a response by said people to said visual stimulus.
2. A system according to claim 1 wherein the behavior pattern includes hesitation or delay in the passage of people through or past the area of interest, consistent with attention being given to the visual stimulus.
3. A system according to claim 2 wherein the degree of interest shown in the stimulus is derived, on-line and with readily available computing power, by means of algorithms operating upon digitized data derived from the video images.
4. A system according to claim 1 wherein the area of interest is defined on a floor portion abutting or otherwise adjacent the stimulus.
5. A system according to claim 1 wherein the video images are derived from at least one overhead television camera mounted directly above the floor portion.
6. A system according claim 1 utilized for in-store monitoring of the response of customers to visual stimuli in the form of displays of goods or products.
7. A system according to claim 6 configured to be capable of detecting interaction of customers with the goods or products in the display.
8. A system according to claim 7 configured to detect a customer reaching out to touch, remove or replace the goods or products on display.

9. A system according to claim 8 wherein means are provided for correlating the removal of goods or products from the display with the subsequent purchase thereof, as represented by a stock indicator, such as a bar code and reader, associated with a till or other point of sale device.
10. A system according to claim 9 further comprising discriminator means capable of indicating the removal of goods or product from individual locations in the display.
11. A system according to claim 10 wherein the discriminator means comprises a network of crossed beams of energy defined immediately adjacent or within the display.
12. A system according to claim 11 wherein the beams of energy comprise collimated infra-red beams.
13. A system according to claim 1 wherein counting of people within the area of interest is effected by means including edge detection.
14. A system according to claim 1 wherein counting of people within the area of interest is effected by means including moving edge detection.
15. A system according to claim 14 wherein a number of people counted using said moving edge detection is subtracted from a total number of people in said area to provide an indication of a number of stationary people in said area.
16. A system according to claim 1 wherein counting of people with in the area of interest is effected by means evaluating percentage occupancy of pixels in said video image of said area of interest.
17. A system according to claim 1 wherein detection of motion of people within said area of interest is effected by blocks matching means.

18. A system according to claim 1 wherein the indication of response is combined with that derived from other areas of interest in order to permit the assimilation of indications relating to a plurality of said areas for comparison and evaluation.